

## AGC/WSDOT Structures Team Minutes July 18, 2004

### Members in Attendance

<b>Attendees:</b>	<b>Company</b>	<b>Phone</b>	<b>E-mail</b>
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The meeting began at 9:00 AM. June 18, 04 meeting notes were reviewed and approved with minor editorial corrections. Jack Echland attended the meeting for John Quigg.

### **Retaining Wall Backfill Waiting Period**

Mo thanked the members for their editorial feedback for this Specification. The latest version will be included in the Specifications. This change can be applied to the existing contracts. The terms of the change order must be negotiated for each contract.

**Action Plan:** Mo will include the updates to the Specification 2-09.3(1)E in the next amendments.

### **New Vibration Limits Specifications**

Jim handed out the draft version of this spec. The team suggested the following Revisions:

- Add a horizontal safe distance that monitoring would not be necessary
- Create a list of construction equipment that do not cause any vibrations of concern. Tom suggested that such list be included in the Construction Manual.

- When cold curing with temperatures below 50, three days of monitoring will not be adequate.

**Action Plan:** Jim will update the Spec with the above comments for the next meeting. Charlie will do some monitoring in the field and will provide input to the team. Ryan will research vibration monitoring costs.

### **Dowel Embedment Lengths**

Jugesh explained that the embedment lengths stated in the BDM are more conservative than the manufacturer recommended lengths due to the vibratory nature of the application of the connection in bridges. The intent is for rebar to yield first.

**Action Plan:** Jim agreed to conduct more research on this topic and advise the team for the September meeting.

### **Early Grout Strength and Curing Before Application of Load**

Charlie indicated that achieving the min. compressive strength of 4000 psi in a short time is not a concern. He said they cure the grout pads while the load (girders) are in place.

**Action Plan:** Mo will clarify the intent of the Std Specs 6-02.3(20)

### **Min. Compressive Strength & Cure Time For Footings Before Placement of columns & Abutments**

Mo asked the team what the appropriate curing time for footing or pile cap strength should be before columns or abutments are placed particularly during cold weather. The general consensus was that when the initial concrete setting takes place the next lift can be placed.

**Action Plan:** No further action is needed

### **Variable Web Heights for CIP Boxes on Sharp Superelevation**

Dan handed out a sketch of box geometry that would dictate variable height web heights with changing superelevation. He indicated that forming for this type of boxes is cumbersome and expensive. Also, the rebar fabricator had a difficult time providing the correct stirrup lengths. The discussion centered on providing a constant geometry for the box that would rotate with respect to the superelevation. Another issue that was debated was whether the center web needed to be plumb.

**Action Plan:** Mo and Jugesh will investigate this topic and will get back to the team for the next meeting.

**Review of the Std. Specs.**

**6-02.3(19)A –Elastomeric Bearing Pads**

There was a discussion about if other materials such as resins would be acceptable in addition to the rubber cement. There was a preference to specify a generic glue if acceptable.

**Action Plan:** Mo will investigate and report back

**6-02.3(19)B – Bridge Bearing Assemblies**

Would greasing the bearings as described in bullet #4 be necessary/?

**Action Plan:** Mo will investigate compatibility with the fabric pad GSP and report back.

**6-02.3(21) – Drainage of Box Girder Cells**

A question was raised weather the drain holes needed to be screened to prevent bird intrusions.

**Action Plan:** Mo will investigate and report back

**6-02.3(22) – Drainage of Substructure**

There was a recommendation to add filter fabric to cover all drain holes.

**Action Plan:** Mo will further research the need and report back.

**New Topics**

Charlie suggested that the team should review the bridge GSPs and BSPs

**Action Plan:** Mo will add this suggestion to the topic of discussions and provide a list of GSPs and BSPs to the team members.

The meeting adjourned at 12:00 PM

**Next meeting is on Aug 13, 04**